



**USAID**  
FROM THE AMERICAN PEOPLE

**MADAGASCAR**

## GLOBAL CLIMATE CHANGE

SEPTEMBER 2003



*USAID continues to be a principal supporter in preserving Madagascar's rich biodiversity. This not only helps protect one of the world's most unique natural resource bases but also greatly assists in mitigating the effects of climate change through maintaining Madagascar's extensive carbon sinks.*

**Background.** Madagascar, an island nation in the Indian Ocean east of southern Africa, is home to flora and fauna unlike anywhere else in the world. However, its unique natural resource base and rich biodiversity are threatened by deforestation, bush fires, soil erosion, and declining soil productivity. These natural resources are not only important for the economic development challenges that the country faces but also for mitigating climate change. Protecting forests and vegetation is beneficial to the climate because they remove carbon dioxide from the atmosphere and store carbon both above ground in their biomass and in the soils below.

**Sector-Specific Climate Change Activities.** USAID helps protect Madagascar's unique resources against further environmental degradation by building local capacity to manage forest and agricultural resources in a more sustainable manner.

**Capacity Building and Natural Resource Management.** Through various capacity-building activities, USAID is helping Madagascar to better understand the United Nations Framework Convention on Climate Change and achieve the goals under the Convention. Based on a request from the president of Madagascar, USAID helped launch a national bush fire campaign to reduce the overall impact of uncontrolled bush fires across the country. From a climate perspective, forest and bush fires are undesirable because they release carbon emissions to the atmosphere. To monitor the impact of this program, USAID supports efforts to collect data and analyze satellite imagery of night fires in Madagascar. These data assist in determining whether activities to reduce both bush fires and slash-and-burn agriculture are having an impact in areas of key biodiversity habitats and contribute to monitoring the Madagascar carbon base as a climate change indicator.

To build the capacity of the government, local nongovernmental organizations, and communities to improve management of their natural resources, USAID supports a variety of training and technical assistance activities. For example, USAID has provided support for the management of the National Park System of Madagascar, which maintains a Protected Area Network that spans 1,774,575 hectares and encompasses 84% of the critical biodiversity habitats in the country. As a result, protected area management practices have improved by integrating ecological monitoring into park management and by mapping conservation target areas.

USAID also supports the transfer of management of forest areas from the government to local communities. This transfer provides incentives to

**USAID's partners in climate change activities in Madagascar include\*:**

- The Governments of France, Switzerland, and Germany
- Chemonics International
- Conservation International (CI)
- Ministry of Environment, Water, and Forests (MEEF)
- National Association for Protected Areas Network (ANGAP)
- National Office of the Environment (ONE)
- National Association for Environmental Actions (ANAE)
- Pact Inc.
- QMM (a local subsidiary of the international mining firm Rio Tinto)
- United Nations Development Program (UNDP)
- Wildlife Conservation Society (WCS)
- World Bank/Global Environment Facility (GEF)
- World Wide Fund for Nature

\* Because partners change as new activities arise, this list of partners is not comprehensive.

stop destructive slash-and-burn agricultural practices and to begin to utilize more sustainable forms of land use. As a result of this activity, the rate of deforestation has begun to slow considerably.

*Addressing Madagascar's Vulnerability.* To reduce Madagascar's vulnerability to climatic impacts, USAID has taken several measures. It is working to improve disaster preparedness for cyclones, to which the country is increasingly vulnerable. It also supported the development of a geographic information system (GIS)-based early warning system for flooding based on stream water flow modeling. Finally, through interventions to increase agricultural productivity, the work of USAID is addressing overall food security and rural development in impoverished areas.

For more information on Madagascar, visit USAID/Madagascar's Mission Web site at:

- <http://www.usmission.mg/usaidd/>